

IN THE CLAIMS

Please cancel claims 1-43, all of the claims in the subject U.S. patent application, as filed, as set forth in the verified translation of PCT/DE2003/004098.

Please add new claims 44-85, as follows.

Claims 1-43 (Cancelled)

44. (New) A method for controlling a temperature of a machine component including the steps of:

 determining a first measured value of a machine component temperature at a first measuring point;

 determining a second measured value of a machine component temperature at a second measuring point;

 providing a measuring section on said machine component;
 locating said first measuring point and said second measuring point spaced apart from each other on said measuring section;

 providing a regulating device;
 providing first and second regulating circuits in said regulating device;
 connecting said first and second regulating circuits in a cascade-like manner; and

 providing each one of said first and second measured values to an associated one of said first and second regulating circuits.

45. (New) The method of claim 44 further including providing a temperature control fluid, setting a temperature of said temperature control fluid at a feed-in point using said regulating device and conducting said fluid to said component along an inflow path arranged after, in a direction of fluid flow, said feed-in point.

46. (New) The method of claim 45 further including measuring one of said first and second measured values adjacent said feed-in point and measuring the other of said first and second measured values adjacent said component.

47. (New) A method for controlling a temperature of a machine component including the steps of:

- providing a temperature regulating device;
- providing a temperature regulating fluid;
- using said temperature regulating device for regulating said temperature of said fluid at a fluid feed-in point;
- providing a fluid inflow path from said feed-in point to the machine component whose temperature is being controlled;
- conducting said temperature regulating fluid to the machine component along said fluid inflow path from said feed-in point;
- providing a temperature measuring section;
- determining first and second measured temperature values of said temperature regulating fluid at first and second temperature measuring points of said temperature measuring section;

supplying said first and second measured temperature values to said regulating device; and

determining said first measured temperature value near said feed-in point and determining said second measured temperature value near the component.

48. (New) The method of claim 47 further including providing a fluid drive mechanism in said fluid inflow path and determining said first measured temperature value after said feed-in point and before said fluid drive mechanism.

49. (New) The method of claim 47 further including providing said second measured temperature measuring point along said fluid inflow path and located, in a running time of said fluid, further than half of a distance from said feed-in point to the machine component.

50. (New) The method of claim 47 further including providing first and second regulating circuits in said regulating device, connecting said first and second regulating circuits with each other in a cascade-like manner, and supplying each one of said first and second measured temperature values to an associated one of said first and second regulating circuits.

51. (New) The method of claim 50 further including providing said first and second regulating circuits as inner and outer circuits, providing an actuating member, acting on said actuating member with said inner circuit with an actuating command, providing an

output value of said outer circuit and using said output value for forming a corrected command variable for said inner regulating circuit.

52. (New) The method of claim 51 further including using a theoretical command variable for forming said corrected command variable and forming said theoretical command variable in a pre-regulating member in respect to a heat flow value and taking expected heat and cooling losses in said measuring section into consideration.

53. (New) The method of claim 51 further including forming a corrected command variable for said outer regulating circuit and forming said outer regulating circuit corrected command variable using pre-regulation of at least one of a running time and a time constant.

54. (New) The method of claim 51 further including providing a corrected command variable for each of said two regulating circuits and pre-regulating a specific excess amplitude by using a derivative member for forming said corrected command variables for said at least two regulating circuits.

55. (New) The method of claim 51 further including determining a number of revolutions of the machine component and using said number of revolutions for pre-regulation for forming said corrected command variable for at least said inner regulating circuit.

56. (New) The method of claim 51 further including pre-regulating actuating member characteristics by using a rise limiter for forming said corrected command variable for at least said inner regulating circuit.

57. (New) The method of claim 50 further including providing a third temperature measuring point and a third regulating circuit, determining said temperature at said first, second and third temperature measuring points and supplying said temperatures to respectively one of said first, second and third regulating circuits connected to each other in a cascade-like manner.

58. (New) The method of claim 57 further including determining said second temperature measured value as a temperature of said fluid prior to entering the component.

59. (New) The method of claim 58 further including providing a fluid drive mechanism in said fluid inflow path and measuring said temperature in said inflow path downstream of said drive mechanism.

60. (New) The method of claim 57 further including using said third measured value as a temperature of the component.

61. (New) The method of claim 57 further including providing a fluid exiting the component and using a temperature of said fluid following its exit from the component

as said third measured value.

62. (New) The method of claim 51 further including providing a first fluid circuit, circulating said temperature regulating fluid at least partially in said first fluid circuit, providing said actuating member as a valve and controlling said temperature control fluid in said first circuit from said second circuit using said valve.

63. (New) The method of claim 51 further including providing a fluid heating and cooling unit, providing a fluid circulating circuit and providing said actuating member as an output control.

64. (New) A device adapted to control the temperature of a component of a machine comprising:

a regulating device;

at least first and second regulating circuits in said regulating device;

means connecting said at least first and second regulating circuits with each other in a cascade-like manner;

a measuring section of the component;

at least first and second measuring points on said measuring section and being spaced apart on said measuring section; and

means supplying measured values from said measuring points to said regulating circuits.

65. (New) The device of claim 64 further including an actuating member and wherein an output signal from an inner one of said at least first and second regulating circuits is fed as an actuating command to said actuating member, and further wherein an output value from an outer one of said at least first and second regulating circuits is fed as an input to said inner regulating circuit.

66. (New) The device of claim 65 further including a pre-regulating member in at least said inner regulating circuit and adapted to generate a theoretical command variable and which takes expected heat and cooling losses in said measuring section into consideration.

67. (New) The device of claim 65 further including a pre-regulating member in at least said outer regulating circuit and wherein one of a running time of a fluid and a replacement time constant can be taken into consideration in forming a command variable.

68. (New) The device of claim 65 further including a derivative member for each of said at least first and second regulating circuits and adapted to generate a specific amplitude variation during formation of a command variable.

69. (New) The device of claim 65 further including a pre-regulating device in at least said inner regulating circuit and adapted to take into consideration a number of revolutions of the machine in the formation of a command variable.

70. (New) The device of claim 65 further including a rise limiter provided as a pre-regulating member for at least said inner regulating circuit and adapted to include characteristics of said actuating member during formation of a command variable.

71. (New) The device of claim 64 further including a third regulating circuit in said regulating device, said first, second and third regulating circuits being connected to each other in a cascade-like manner, and a third measuring point on said measuring section, each of said third regulating circuits receiving a measured value from one of said first, second and third measuring points which are arranged spaced apart from each other on said measuring section.

72. (New) The device of claim 64 further including PI regulators in said at least first and second regulating circuits.

73. (New) The device of claim 64 further including a regulator based on running time in at least one of said first and second regulating circuits.

74. (New) A device adapted to control the temperature of a machine comprising:

- a fluid inflow path to the machine;
- a fluid feed-in point arranged upstream of said fluid inflow path, said fluid feed-in point receiving a fluid whose temperature can be changed;
- means conducting said fluid along said fluid inflow path to the machine located downstream of said fluid feed-in point; and

at least first and second measuring points on said fluid inflow path, said first second measuring point being located adjacent said feed-in point, said second measuring point being located near the component.

75. (New) The device of claim 74 further including a fluid conveying drive means in said fluid inflow path, said first measuring point being located downstream of said feed-in point and upstream of said drive means.

76. (New) The device of claim 74 further including a fluid conveying drive means in said fluid inflow path and that for cooling, said second measuring point being located between said drive means and said machine.

77. (New) The device of claim 76 wherein said second measuring point is arranged in said inflow path upstream of an entrance of said fluid into the machine.

78. (New) The device of claim 79 further including a common regulating device adapted to receive measured values from said first and second measuring points.

79. (New) The device of claim 74 wherein said first measuring point is arranged upstream of said feed-in point at a distance no greater than a two second running time of said fluid.

80. (New) The device of claim 74 further including a distance between said feed-in

point and said machine, said second measuring point being located more than half of said distance from said feed-in point with respect to a running time of said fluid.

81. (New) The device of claim 74 further including a third measuring point and a temperature regulating device having inner and outer regulating circuits arranged in a cascade-like manner.

82. (New) The device of claim 74 further including a pump in said fluid inflow path, said first measuring point being located between said feed-in point and said pump.

83. (New) The device of claim 74 further including a swirl chamber in said fluid inflow path between said feed-in point and said first measuring point.

84. (New) The device of claim 74 wherein said machine is one of a roller and a cylinder of a printing press.

85. (New) The device of claim 84 wherein said printing press is a dampening agent-free offset printing press.